

CB



PCT09

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/890,475

DATE: 01/22/2002
 TIME: 16:34:40

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3 <110> APPLICANT: Johanson, Urban
 4 West, Joanne
 5 Dean, Caroline
 7 <120> TITLE OF INVENTION: Arabidopsis thaliana derived Frigida gene conferring late
 flowering
 9 <130> FILE REFERENCE: Mewburn
 11 <140> CURRENT APPLICATION NUMBER: US 09/890,475
 C--> 12 <141> CURRENT FILING DATE: 2001-11-13
 14 <150> PRIOR APPLICATION NUMBER: PCT/GB00/00197
 15 <151> PRIOR FILING DATE: 2000-01-25
 17 <150> PRIOR APPLICATION NUMBER: GB 9902660.1
 18 <151> PRIOR FILING DATE: 1999-02-05
 20 <160> NUMBER OF SEQ ID NOS: 58
 22 <170> SOFTWARE: PatentIn Ver. 2.1
 24 <210> SEQ ID NO: 1
 25 <211> LENGTH: 609
 26 <212> TYPE: PRT
 27 <213> ORGANISM: Artificial Sequence
 29 <220> FEATURE:
 30 <223> OTHER INFORMATION: Description of Artificial Sequence: FRI amino acid
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 38 20 25 30
 40 Pro Lys Ile Val Glu Thr Glu Ser Thr Ser Met Asp Ile Thr Ile Gly
 41 35 40 45
 43 Gln Ser Lys Gln Pro Gln Phe Leu Lys Ser Ile Asp Glu Leu Ala Ala
 44 50 55 60
 46 Phe Ser Val Ala Val Glu Thr Phe Lys Arg Gln Phe Asp Asp Leu Gln
 47 65 70 75 80
 49 Lys His Ile Glu Ser Ile Glu Asn Ala Ile Asp Ser Lys Leu Glu Ser
 50 85 90 95
 52 Asn Gly Val Val Leu Ala Ala Arg Asn Asn Asn Phe His Gln Pro Met
 53 100 105 110
 55 Leu Ser Pro Pro Arg Asn Asn Val Ser Val Glu Thr Thr Val Thr Val
 56 115 120 125
 58 Ser Gln Pro Ser Gln Glu Ile Val Pro Glu Thr Ser Asn Lys Pro Glu
 59 130 135 140
 61 Gly Gly Arg Met Cys Glu Leu Met Cys Ser Lys Gly Leu Arg Lys Tyr
 62 145 150 155 160
 64 Ile Tyr Ala Asn Ile Ser Asp Gln Ala Lys Leu Met Glu Glu Ile Pro
 65 165 170 175

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67 Ser Ala Leu Lys Leu Ala Lys Glu Pro Ala Lys Phe Val Leu Asp Cys
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73 Pro Met Ser Ser Ala Arg Gln Val Ser Leu Leu Ile Leu Glu Ser Phe
74           210          215          220
76 Leu Leu Met Pro Asp Arg Gly Lys Gly Lys Val Lys Ile Glu Ser Trp
77           225          230          235          240
79 Ile Lys Asp Glu Ala Glu Thr Ala Ala Val Ala Trp Arg Lys Arg Leu
80           245          250          255
82 Met Thr Glu Gly Gly Leu Ala Ala Glu Lys Met Asp Ala Arg Gly
83           260          265          270
85 Leu Leu Leu Leu Val Ala Cys Phe Gly Val Pro Ser Asn Phe Arg Ser
86           275          280          285
88 Thr Asp Leu Leu Asp Leu Ile Arg Met Ser Gly Ser Asn Glu Ile Ala
89           290          295          300
91 Gly Ala Leu Lys Arg Ser Gln Phe Leu Val Pro Met Val Ser Gly Ile
92           305          310          315          320
94 Val Glu Ser Ser Ile Lys Arg Gly Met His Ile Glu Ala Leu Glu Met
95           325          330          335
97 Val Tyr Thr Phe Gly Met Glu Asp Lys Phe Ser Ala Ala Leu Val Leu
98           340          345          350
100 Thr Ser Phe Leu Lys Met Ser Lys Glu Ser Phe Glu Arg Ala Lys Arg
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104           370          375          380
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107           385          390          395          400
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121 Val Thr Ser Ser Tyr Ser Pro Ile Tyr Arg Asp Arg Ser Phe Pro
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125           485          490          495
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128           500          505          510
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131           515          520          525
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134           530          535          540
136 Arg Leu His Arg Gln Tyr Ser Pro Ser Leu Val His Gly Gln Arg His
137           545          550          555          560
139 Pro Leu Gln Tyr Ser Pro Pro Ile His Gly Gln Gln Leu Pro Tyr

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154 <211> LENGTH: 3761

155 <212> TYPE: DNA

156 <213> ORGANISM: Arabidopsis thaliana

158 <400> SEQUENCE: 2

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 161 cttttgggtt catattaccg agcaagaacc gttatttgcg attagacatg ttataaacc 180
 162 ctgccttagt gactattaa aacaatataat tacatgtcgt aatcatgca cctaactatg 240
 163 ttttcattaa tcaaatacaa agaataaaaga gaaaagtgcg tagattcaat tatttggcat 300
 164 agactcaaaa gagtgtatata atatctgact ttttattaaat tattaaacac aaatacatat 360
 165 tttcataaccg aaaactataaa aagccctaaa catataatga ttacctcaaa ggaaaaagtc 420
 166 gttttctcct acttaaaaaga taggttactt cctaattaat atataattta tgtgaacttc 480
 167 acaatataca gttcaataaaa atttggtaat ttgaccgatt taaggagatg gaaaattagg 540
 168 gcttcgtcaa tccttttct tcggcccaat ctcatgtcca attatccacc gacgggtggcg 600
 169 gcgcacccca caacgacggc gaatccactg ctgcagcgac atcaatctga acagcgacga 660
 170 agagaattac cgaagattgt cgaaacagag tctacaagta tggacattac gatcggtcaa 720
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 184 tcacagtttcc ttgtccctat ggtctcaggt accatattct gttctcactc ggtgaatttc 1560
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197 agatcaaaga gcaaattgtt agcttggaga aagacactct tcagctcgac aaagagatgg 2340
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199 accaacagat aaaacgtcca aggttgcac ccatggaaat gccaccagta acttcttcat 2460
200 cgtattctcc tatctaccgt gatagaagct ttcctagtca aagagacat gaccaagatg 2520
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236 tattaaatta ttaaacacaa atacatattt tcataagca aactataaaa gccctaaaca 180
237 tataatgatt acctcaaagg aaaaaggctt tttctcctac ttttttttttcc ggttacttcc 240
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247 gaataaaaccg gaggggggac gtatgtgtgaa gttgtatgtt gacaaaggc当地 tgc当地 840
248 catatacgc当地 aatatactctg atcaagctaa gttatggaa gagattccctt cagcttgaa 900
249 attggccaaag gagccagc当地 agtttgc当地 ggattgttatt ggcaagttt acttacaagg 960

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 270 tcgcagtaac tcatcattag accccaaata ggaggaatgt aaatttgtaa caaagctttt 2220
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VERIFICATION SUMMARY

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